REMARKS

Claims 1-3, 8-16, 18-34, 36, 52, and 53 are currently pending in this application. Claims 4-7 and 19 have been cancelled herein without prejudice. Claims 1 and 52 have been amended to incorporate the subject matter of Claims 7 and 19. Claims 8, 9, and 20-22 have been amended to correct claim dependencies. No new matter has been added by this amendment.

Applicant respectfully reserves the right to pursue the claims as originally filed or similar claims as well as any non-elected, canceled or otherwise unclaimed subject matter in one or more continuation, continuation-in-part, or divisional applications.

Rejections under 35 U.S.C. §103 (a)

Claims 1-4, 7-8, and 30-34 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Motokawa et al. J. Chromatography A, 961 (2002) 53-63 ("Motokawa") .

As amended, the claims provide a hybrid inorganic/organic monolith having and an interior area and an exterior surface, wherein the monolith is represented by Formulas I, IV and V and having a surface concentration of R^6 greater than about 1.0 μmol/m^2. That is, and as discussed above, Claim 1 has been amended to incorporate the subject matter of Claims 7 and 19. As such, Applicant respectfully contends that the rejection over Motokawa alone is moot.

Claims 1-16, 19-34, 52, and 53 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. US 6,528,167 to O'Gara ("O'Gara") in view of Motokawa.

The Examiner contends that O'Gara teaches and claims hybrid particles wherein said particles have an interior and exterior surface having the same composition as the instant claims. As such, the Examiner contends that one of ordinary skill in the art would have been motivated to utilize the methods of Motokawa to prepare monoliths from the materials of O'Gara and that the surface modifications to the monolith could be performed by feeding respective chemicals through the monolith to cause desired transformations. Applicant respectfully disagrees and again traverse the rejection.

Applicant previously argued that: monolithic materials are complex materials to make; are prepared by a process that is very different from the process by which porous particles are prepared ; and O'Gara does not disclose porous monolithic materials.

Motokawa relates to monolithic silica capilary columns that are prepared from TMOS and MTES. According to the Examiner, the columns are then surface modified by continuously feeding a solution of octadecyldimethyl-N,N-diethylaminosilane. Both Motokawa and the Examiner admit the addition of octadecyldimethyl-N,N-diethylaminosilane is a surface modification. That is, the octadecyldimethyl-N,N-diethylaminosilane adds directly to the surface of monolith with no selectivity. This is not the same as the selectively cleaved and replaced surface groups as described and claimed.

The Examiner contends that one of ordinary skill in the art would have been motivated by O'Gara to maintain the surface concentrations of O'Gara. However, the Examiner fails to demonstrate how one of ordinary skill in the art would achieve selective replacement by the combination of O'Gara and Motokawa ("the proposed O'Gara/Motokawa monolith"). Indeed, the replacement of O'Gara is achieved by stirring the hybrid particles in order to replace the surface groups. One of ordinary sill in the art readily appreciates that it is not possible to stir a solid monolith without breaking apart the structure of the monolith.

The Examiner contends that the surface modifications to the proposed O'Gara/Motokawa monolith could be performed by feeding respective chemicals through the monolith to cause desired transformations. However, as discussed above, nothing in Motokawa describes a selective cleavage and replacement of surface groups. That is, even assuming, *arguendo*, that the feeding of chemicals through the proposed O'Gara/Motokawa monolith as described by Motokawa would result in a material that formulaically resembles the claimed invention, such surface groups would not be present in the claimed surface concentrations. Indeed, such concentrations are achieved only by the selective cleavage and replacement of surface silicon-carbon groups as described by the Applicants invention.

Applicant contends that nothing in Motokawa suggests the ability to selectively cleave silicon-carbon groups. At best, the combination of O'Gara and Motokawa would suggest the surface modification of surface silicon-hydroxyl groups, if present, in a non-selective manner. That is, one of ordinary skill in the art would have had no reasonable expectation of success in achieving the selective replacement of surface groups using the methods of Motokawa on the materials of O'Gara.

As such, Applicant contends that one of ordinary skill in the art would not find the instant claims obvious in light of O'Gara in combination with Motokawa.

Rejections for Non-Statutory Double Patenting

Claims 1-15 stand provisionally rejected on the grounds of nonstatutory obviousness-type double patenting over Claims 2, 13-17, and 50-55 of copending Application No. 11/631,341.

Claim 1 stands rejected on the grounds of nonstatutory obviousness-type double patenting over Claim 1 of U.S. Patent No. 7, 250,214 to Walter in view of O'Gara.

Applicant respectfully disagrees and traverse the rejections. Nevertheless, Applicant requests an abeyance of the double patenting rejections until such time that the claims are found allowable but for the obviousness-type double patenting rejections. At that time, Applicant may consider filing Terminal Disclaimers to overcome the rejections.

CONCLUSION

In view of the foregoing, reconsideration and withdrawal of all rejections, allowance of the instant application with all pending claims, and prompt issuance of a Notice of Allowance are earnestly solicited. If a telephone conversation with Applicants' representatives would help expedite the prosecution of the above-identified application, Applicant invites the Examiner to call Applicant's representatives at the telephone number below.

In view of the amendments and remarks made herein, the application is believed to be in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are respectfully requested. Please charge any required fee or credit any overpayment to Deposit Account No. 04-1105, under Order No. 59894 (49991).

Dated: May 25, 2011

Respectfully submitted,

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